

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 July 2001 (26.07.2001)

PCT

(10) International Publication Number
WO 01/53919 A3

(51) International Patent Classification⁷: G06F 1/16

(21) International Application Number: PCT/IB01/00067

(22) International Filing Date: 22 January 2001 (22.01.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/490,413 24 January 2000 (24.01.2000) US

(71) Applicant: SPOTWARE TECHNOLOGIES, INC.
[US/US]: 4545 Towne Centre Court, San Diego, CA
92121-3030 (US).

(72) Inventor: GREENWOOD, Jon, Michel; 2709 Dublin
Road, Parker, TX 75002 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,

DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

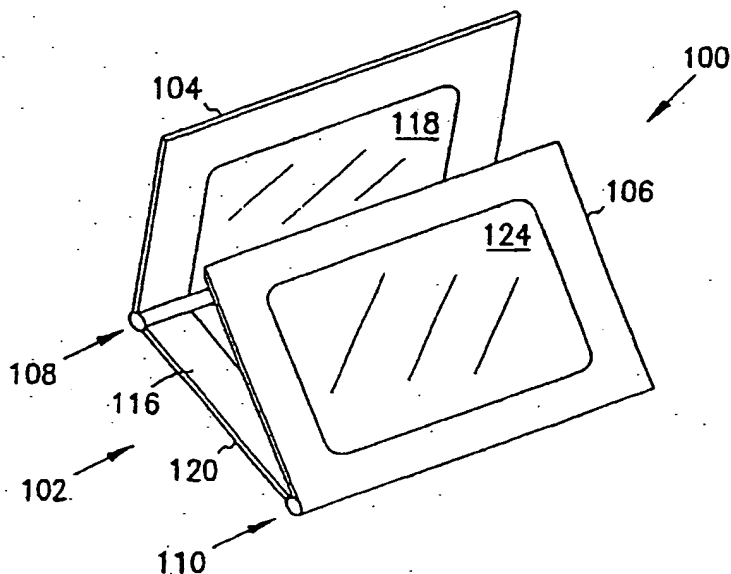
Published:

— with international search report

(88) Date of publication of the international search report:
16 May 2002

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: COMPACTABLE/CONVERTIBLE MODULAR PDA



(57) Abstract: A digital information appliance (100) comprises a housing (102) having at least one foldable panel rotatably (104, 106) attached. A first display region (112) comprises a first segment (114) on a top surface of the housing and a second segment (118) on an inside surface of a panel such that the two segments of the display region are closely adjacent each other when the foldable panel is in an opened position. The appliance also may comprise one or more additional display regions (122) that operate in connection with the first display region in various operating modes of the appliance when the foldable panel is in an opened position and in a closed position. When the appliance has a panel closed and obstructing a portion of the first display region, input and display of information may be handled by another display region, including a second display region on an outside surface of the

WO 01/53919 A3

foldable panel.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 01/00067

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F1/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 900 848 A (HANEDA ET AL.) 4 May 1999 (1999-05-04) column 4, line 66 -column 6, line 25 column 9, line 5 -column 10, line 46; figures 3-5, 11A, 12, 13	1, 5 8, 10, 12, 18, 23
X A	EP 0 898 223 A (LUCENT TECHNOLOGIES INC.) 24 February 1999 (1999-02-24) paragraph '0002! - paragraph '0015! paragraph '0018! - paragraph '0021!; figures 1A-1C, 2, 4	8, 10-12, 18-20, 22 1, 5, 23-26
X A	WO 98 19226 A (THEREFORE LTD.) 7 May 1998 (1998-05-07) page 6, line 22 -page 9, line 15; figures 1, 2, 5, 6	8, 11, 12, 16, 18, 20 1, 6, 23
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *A* document member of the same patent family

Date of the actual completion of the international search

18 January 2002

Date of mailing of the international search report

29/01/2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Sampele, M

INTERNATIONAL SEARCH REPORT

Intern. Patent Application No

PCT/IB 01/00067

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 0 776 140 A (NOKIA MOBILE PHONES LTD.) 28 May 1997 (1997-05-28) column 2, line 2 - line 39 column 2, line 56 -column 3, line 23 column 3, line 52 -column 5, line 5 column 9, line 21 - line 35; figures 2,3,5	8,18,20, 22 1,23

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 01/00067

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5900848	A	04-05-1999	JP 3222764 B2	29-10-2001
			JP 9305262 A	28-11-1997
			CN 1168498 A	24-12-1997
			EP 0807879 A2	19-11-1997
			KR 239012 B1	15-01-2000
EP 898223	A	24-02-1999	US 6144358 A	07-11-2000
			CA 2244327 A1	20-02-1999
			CN 1208881 A	24-02-1999
			EP 0898223 A2	24-02-1999
			JP 11149266 A	02-06-1999
WO 9819226	A	07-05-1998	AT 205612 T	15-09-2001
			AU 730918 B2	22-03-2001
			AU 4786597 A	22-05-1998
			DE 69706695 D1	18-10-2001
			EP 0932861 A1	04-08-1999
			WO 9819226 A1	07-05-1998
			JP 2001503172 T	06-03-2001
EP 776140	A	28-05-1997	FI 955682 A	25-05-1997
			EP 0776140 A1	28-05-1997
			JP 9181802 A	11-07-1997
			US 6047196 A	04-04-2000